

○ source

● listener

FIG. 1
(Prior Art)

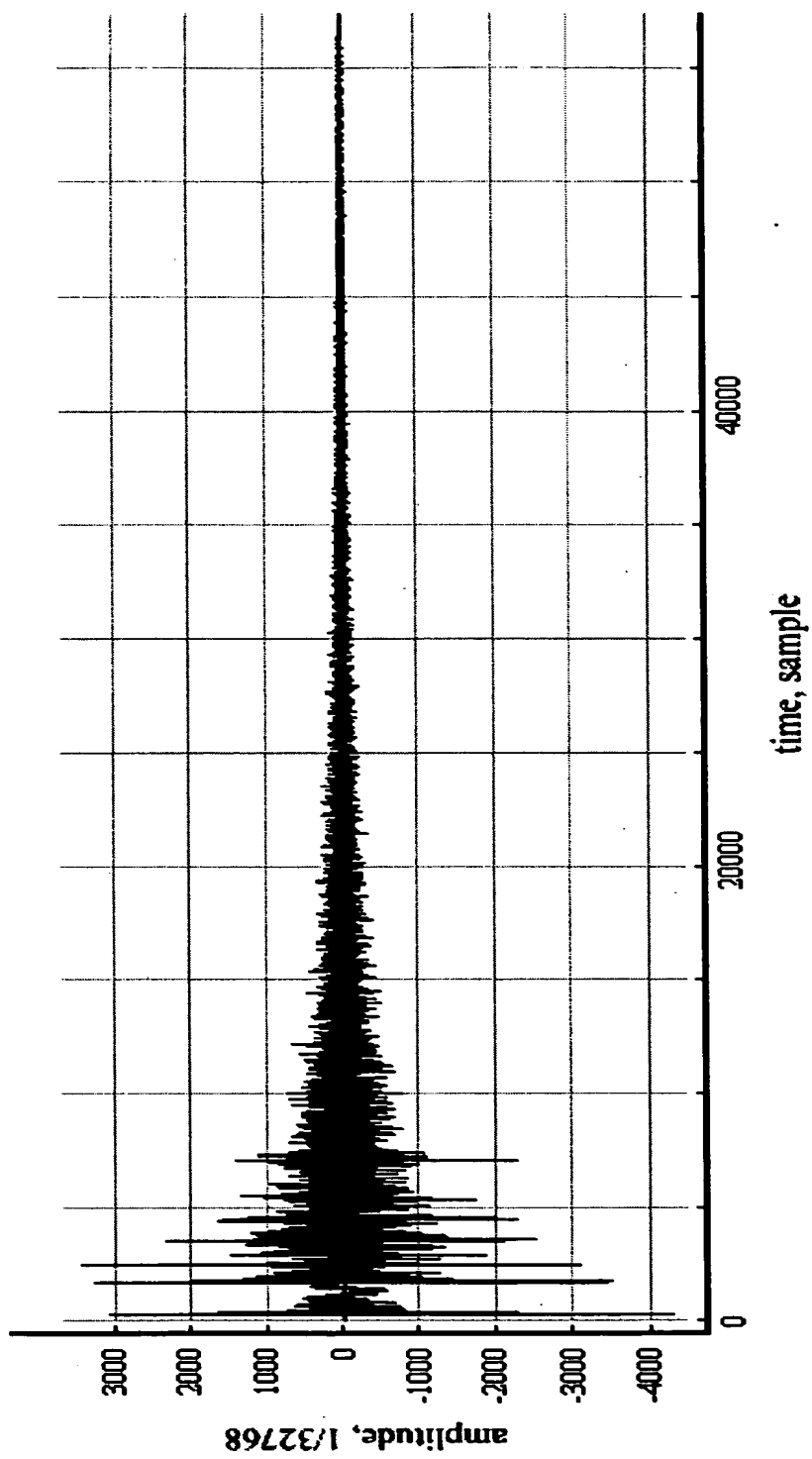


FIG. 2
(Prior Art)

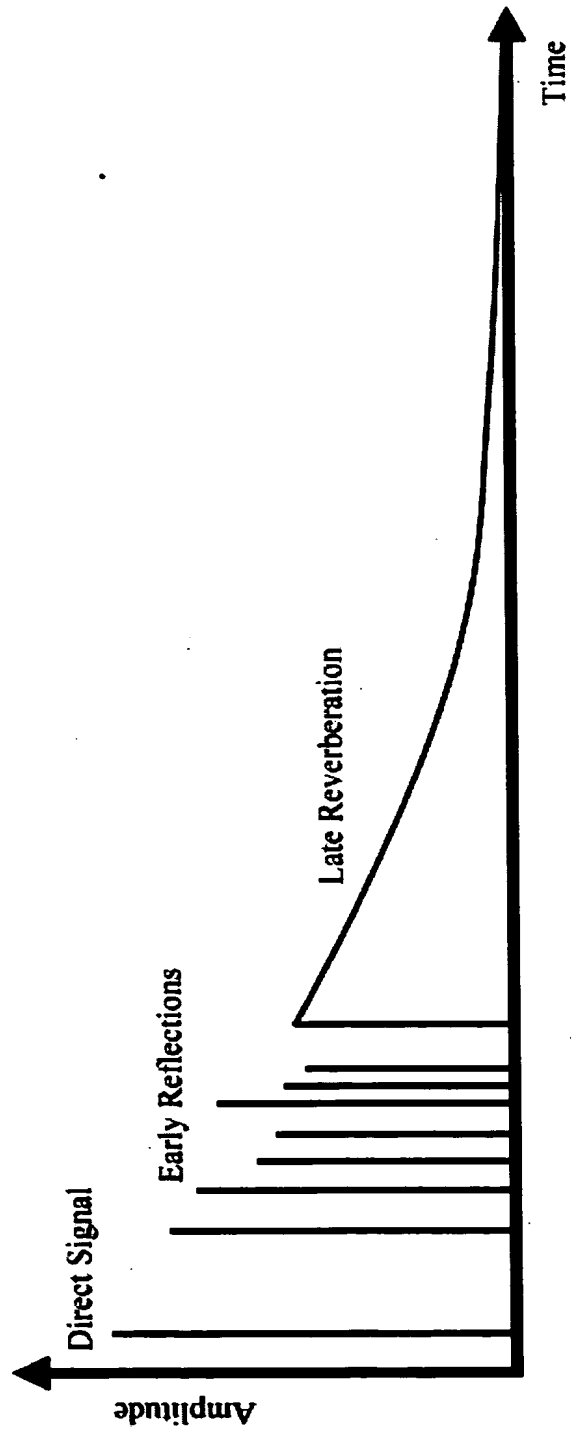


FIG. 3
(Prior Art)

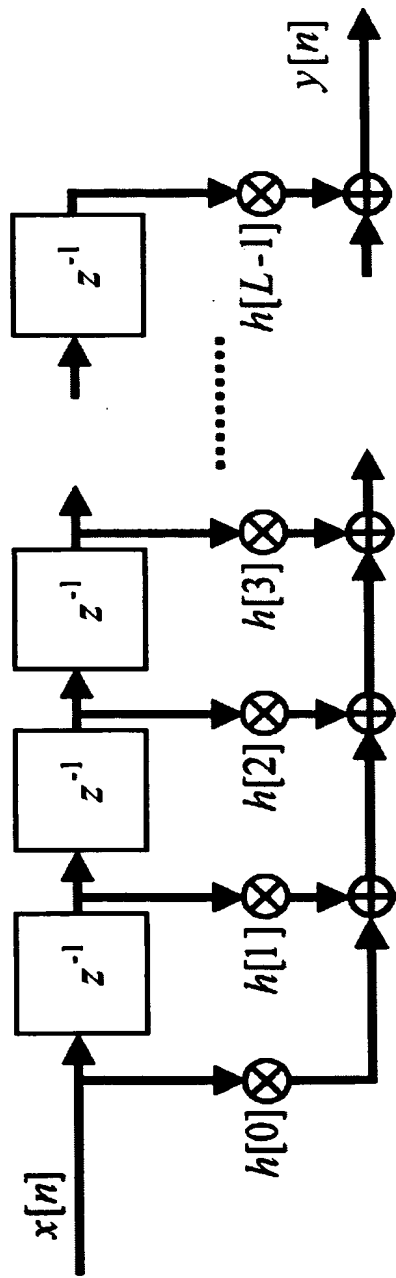


FIG. 4
(Prior Art)

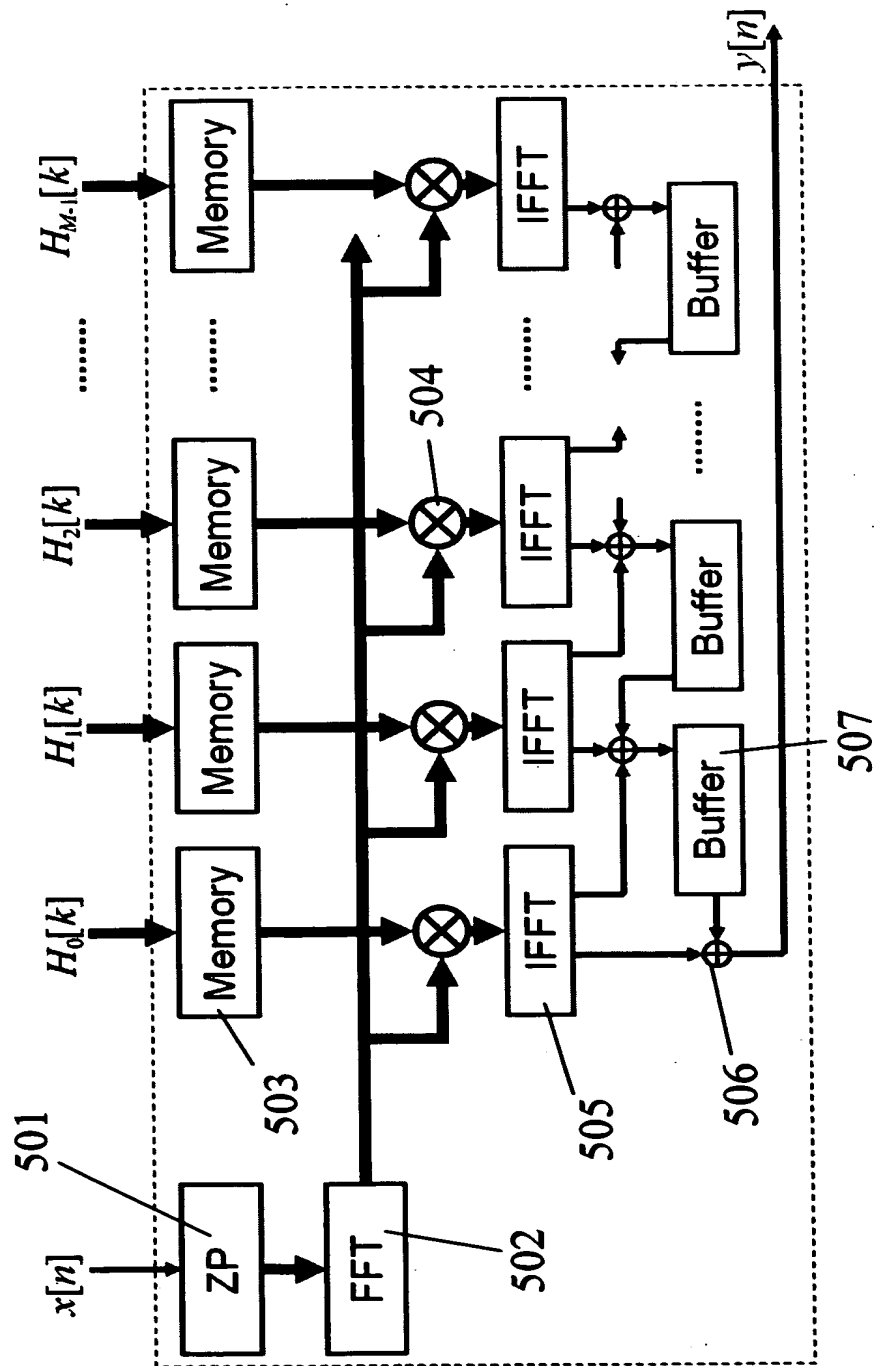


FIG. 5

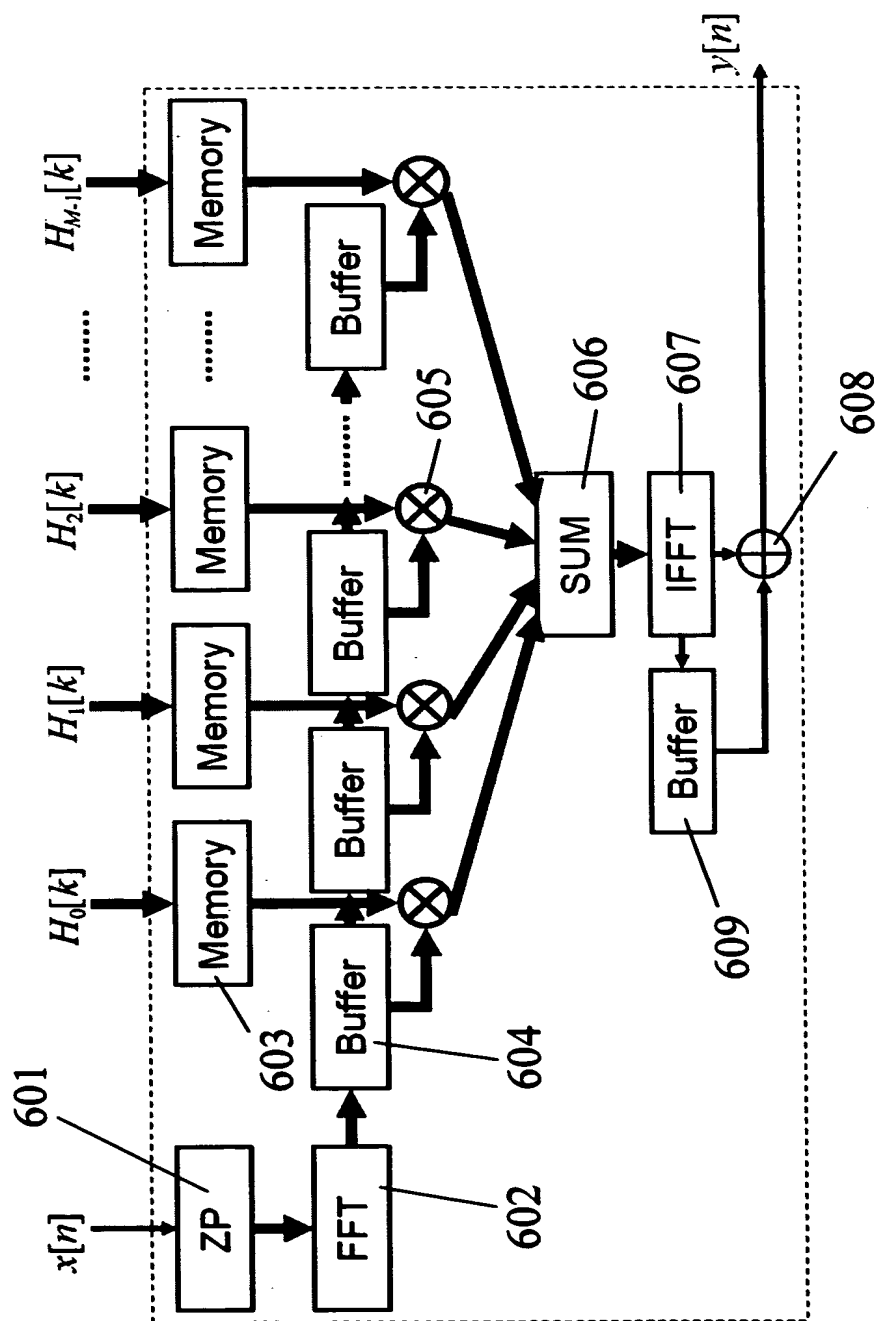


FIG. 6

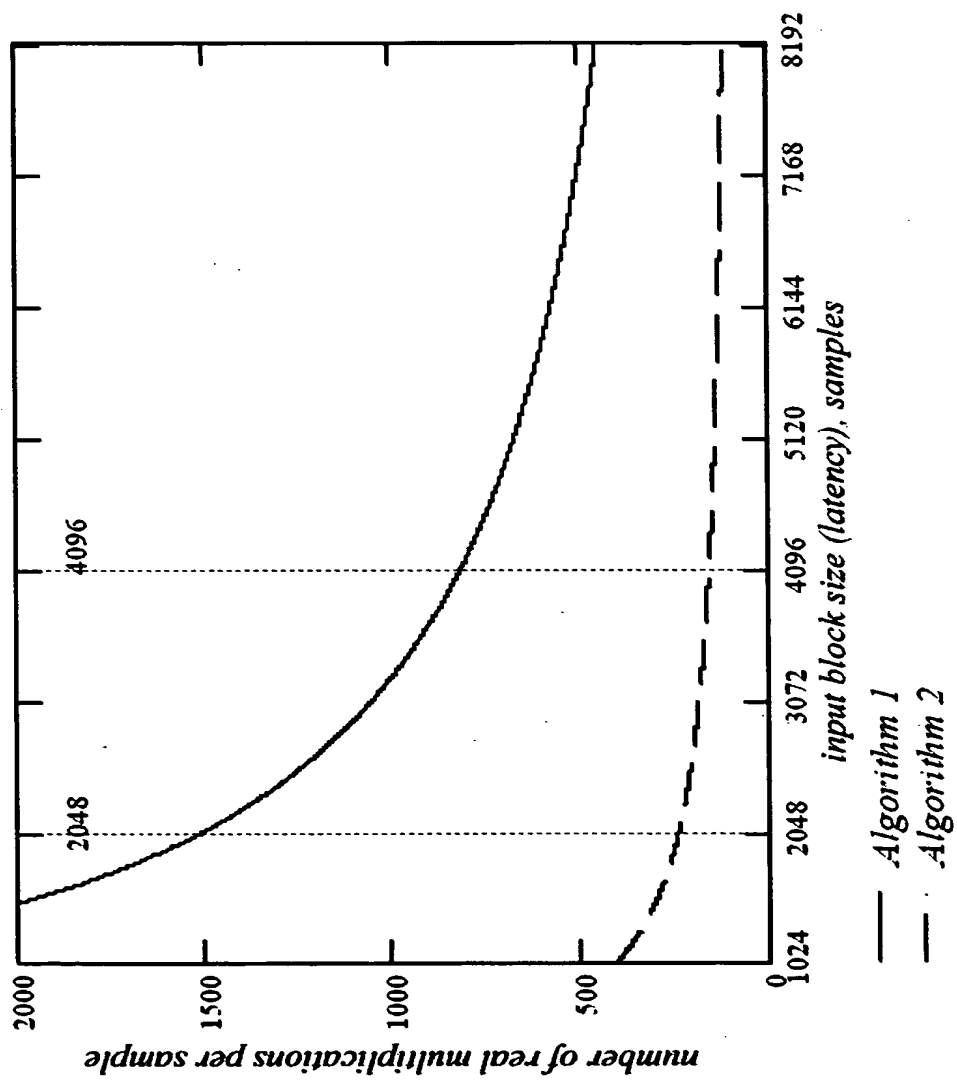


FIG. 7

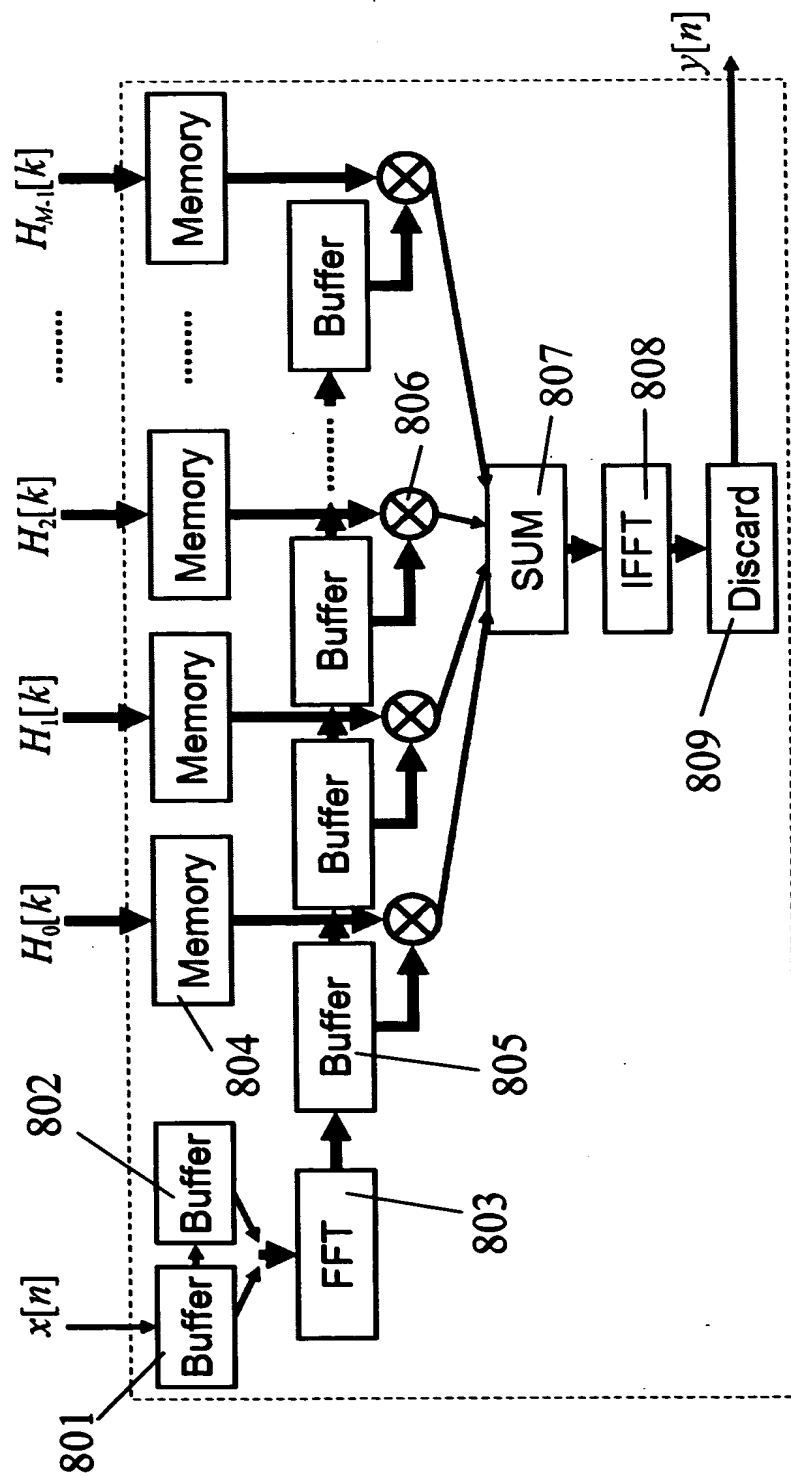


FIG. 8

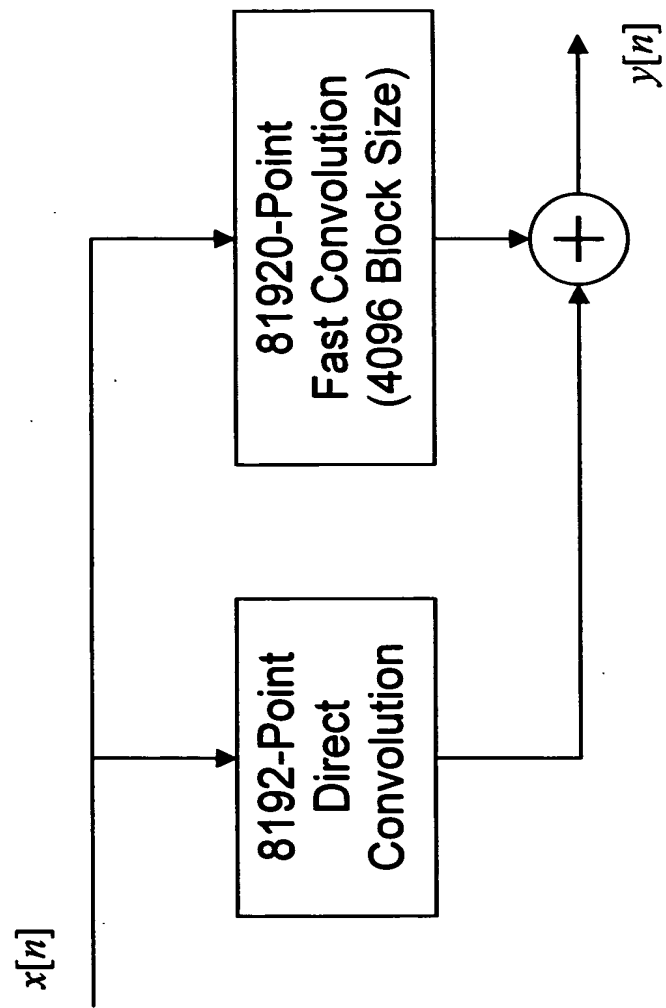


FIG. 9

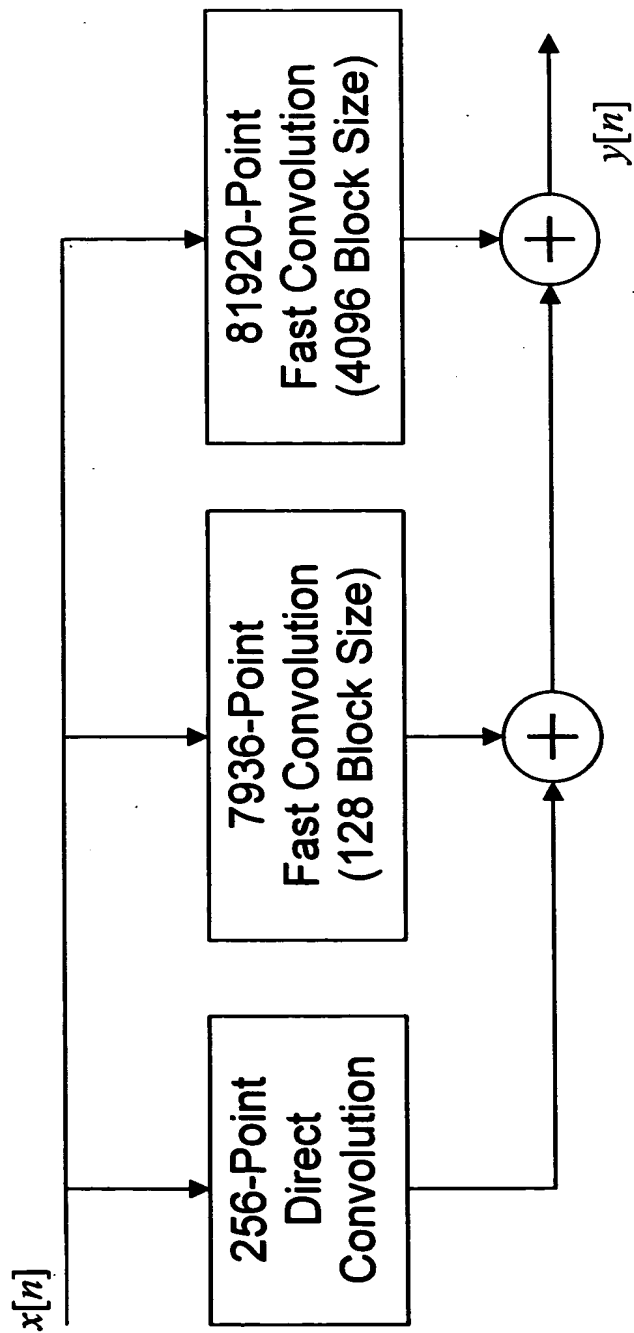


FIG. 10

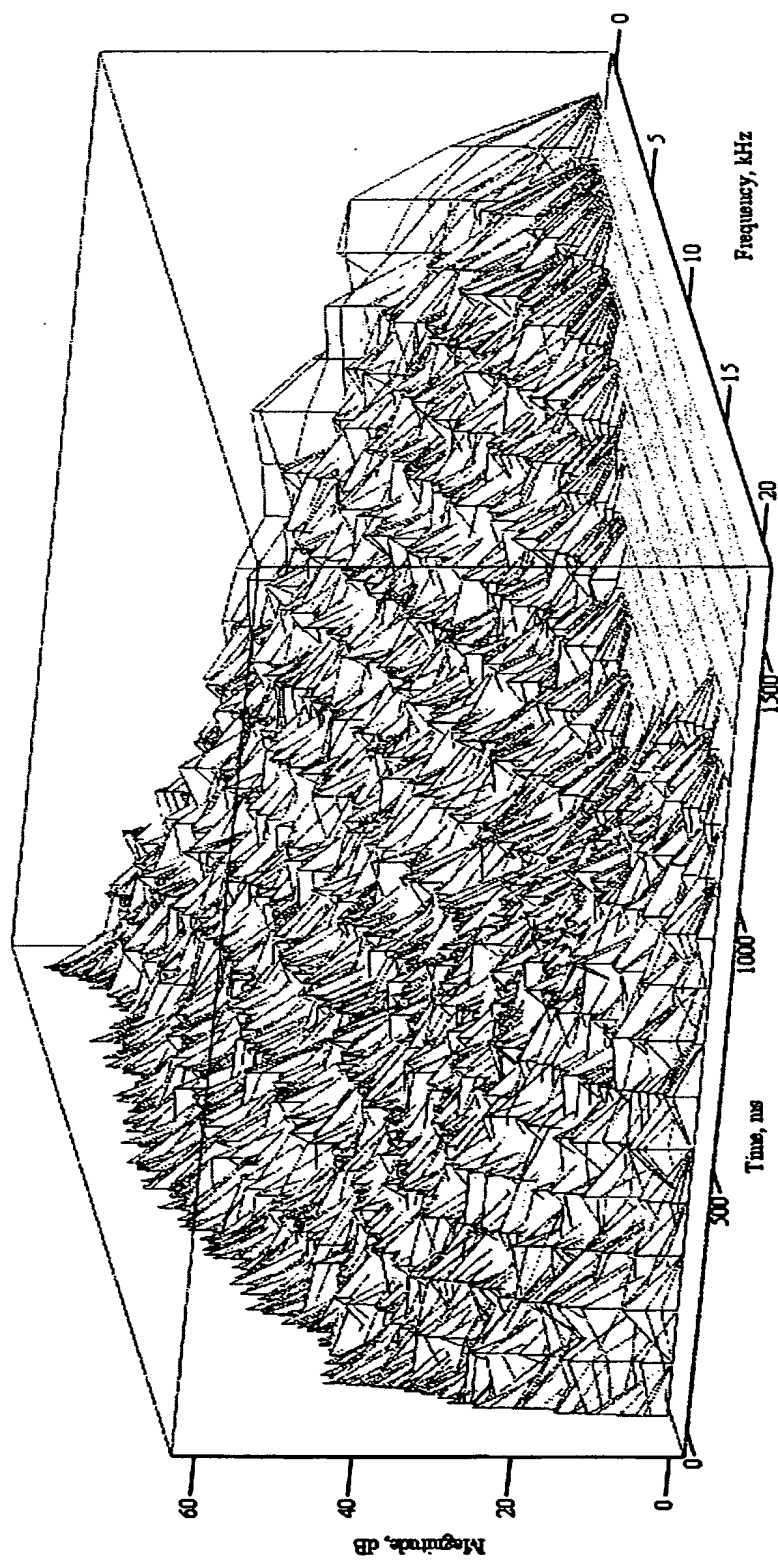


FIG. 11

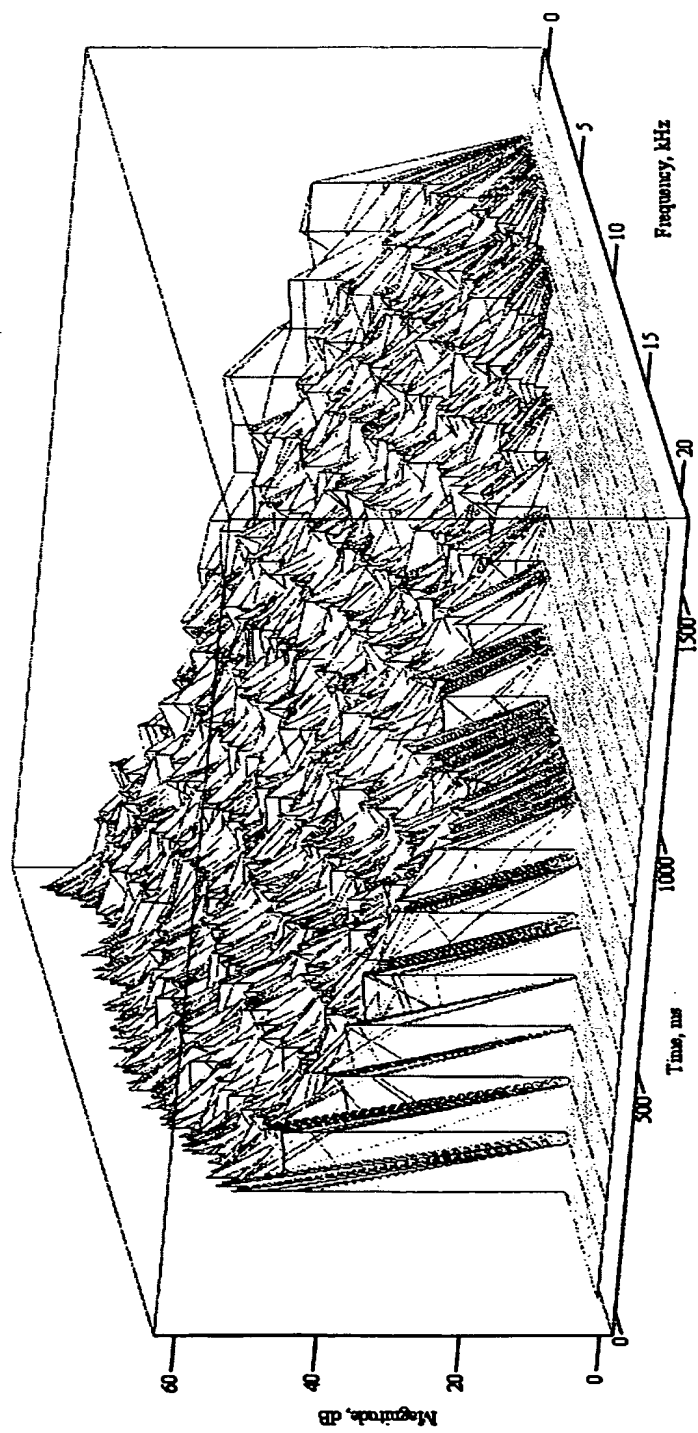


FIG. 12

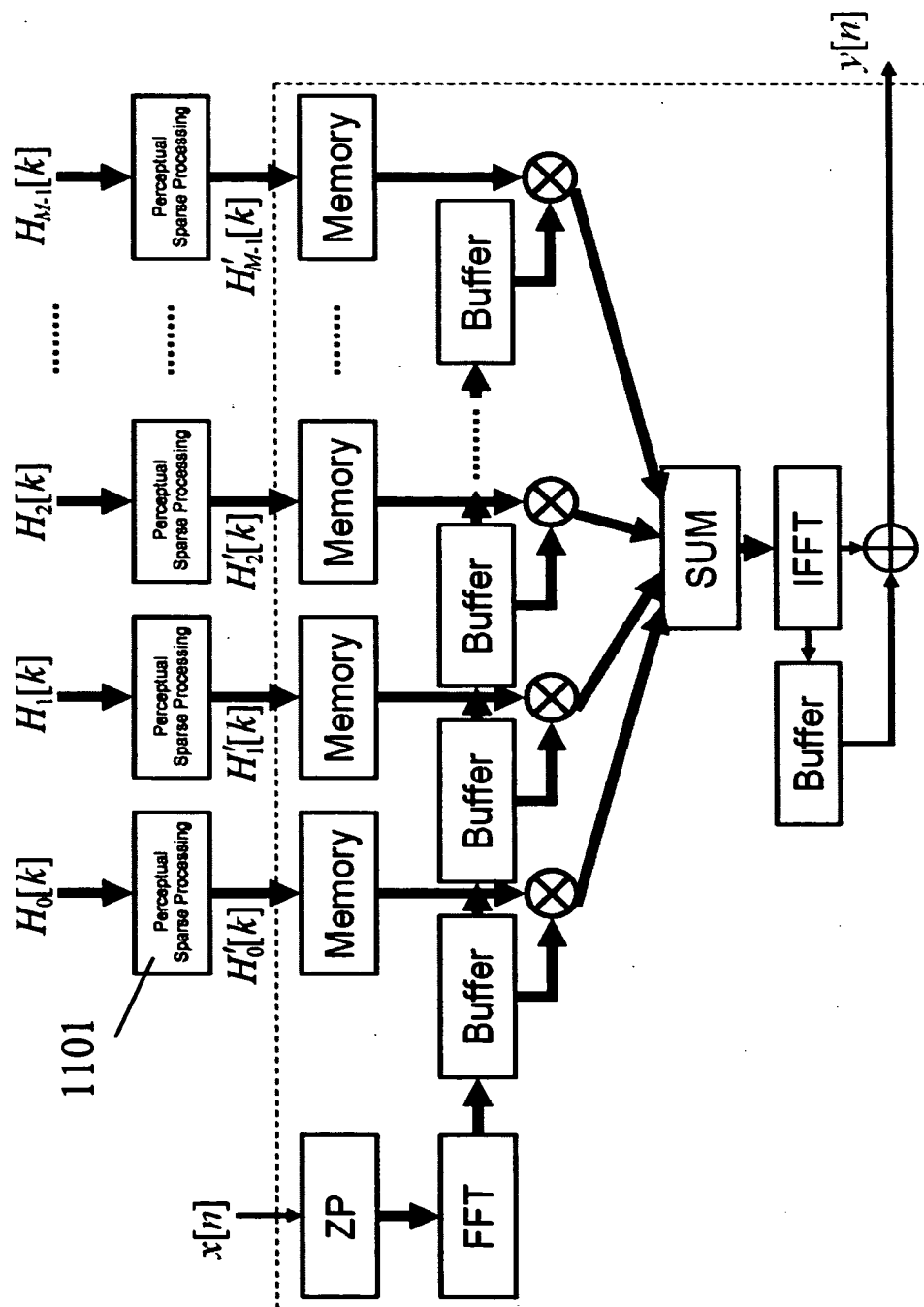


FIG. 13

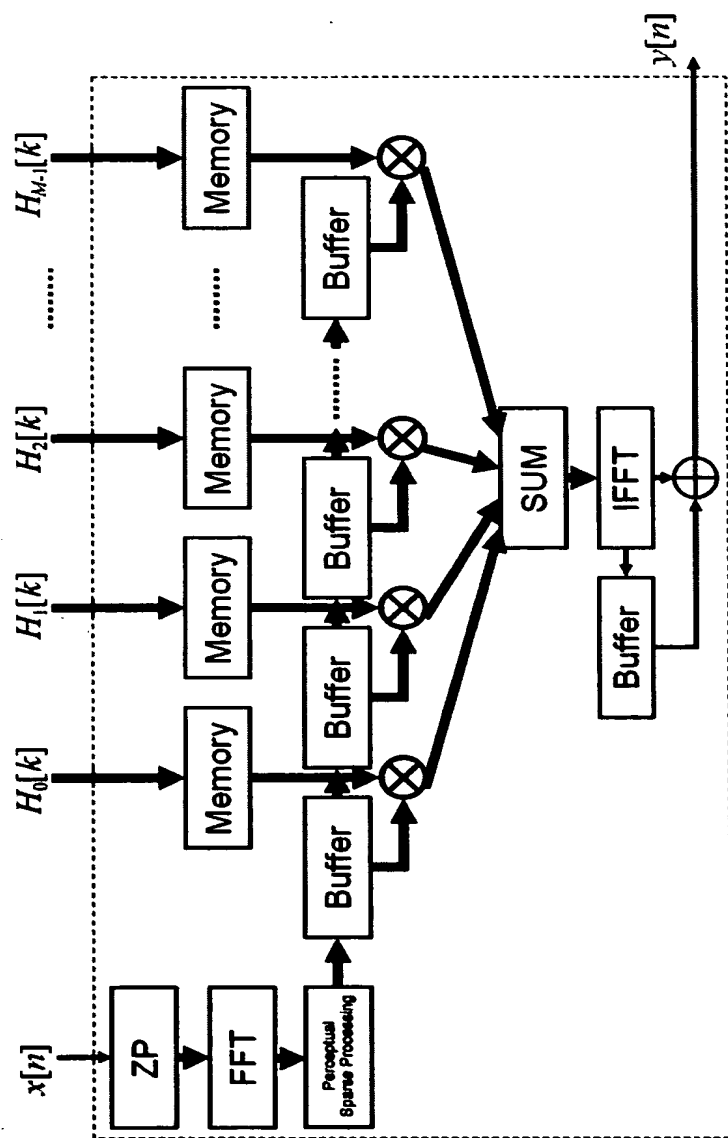


FIG. 13A

Impulse Response		St John Lutheran 40	Foellinger Great Hall 80	Bethel Church 50	Meyerson Concert Hall
Block count		17	17	17	15
Block Index	1	3052	3000	2992	2996
	2	2956	2964	2976	2892
	3	2896	2904	2900	2784
	4	2812	2812	2828	2632
	5	2716	2708	2680	1708
	6	2512	2544	1692	1548
	7	1652	1644	1476	1312
	8	1468	1544	1332	1244
	9	1264	1336	1244	1104
	10	1156	1220	1140	1088
	11	1088	1136	1024	996
	12	976	1104	992	920
	13	928	1048	956	876
	14	788	948	856	760
	15	568	860	800	0
	16	0	544	732	
	17	0	0	544	
Eliminated Percentage		61.47%	59.33%	60.99%	62.79%

FIG. 14

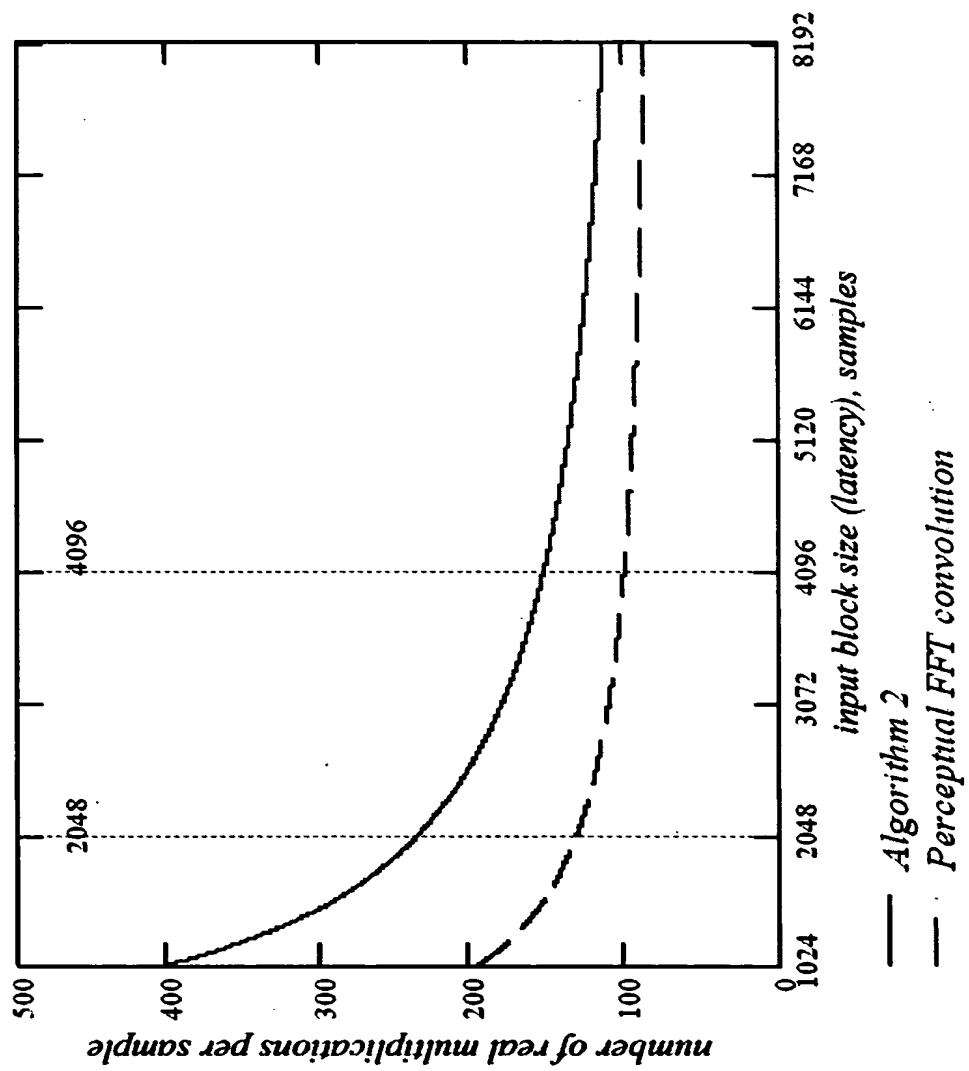


FIG. 15

Time in ms	St John Lutheran 40	Foellinger Great Hall 80	Bethel Church 50	Meyerson Concert Hall
Algorithm 2	89469	88027	84692	82549
Fast perceptual convolution	59566	61057	58694	57032
Improved Ratio	33.42%	30.64%	30.70%	30.91%

FIG. 16

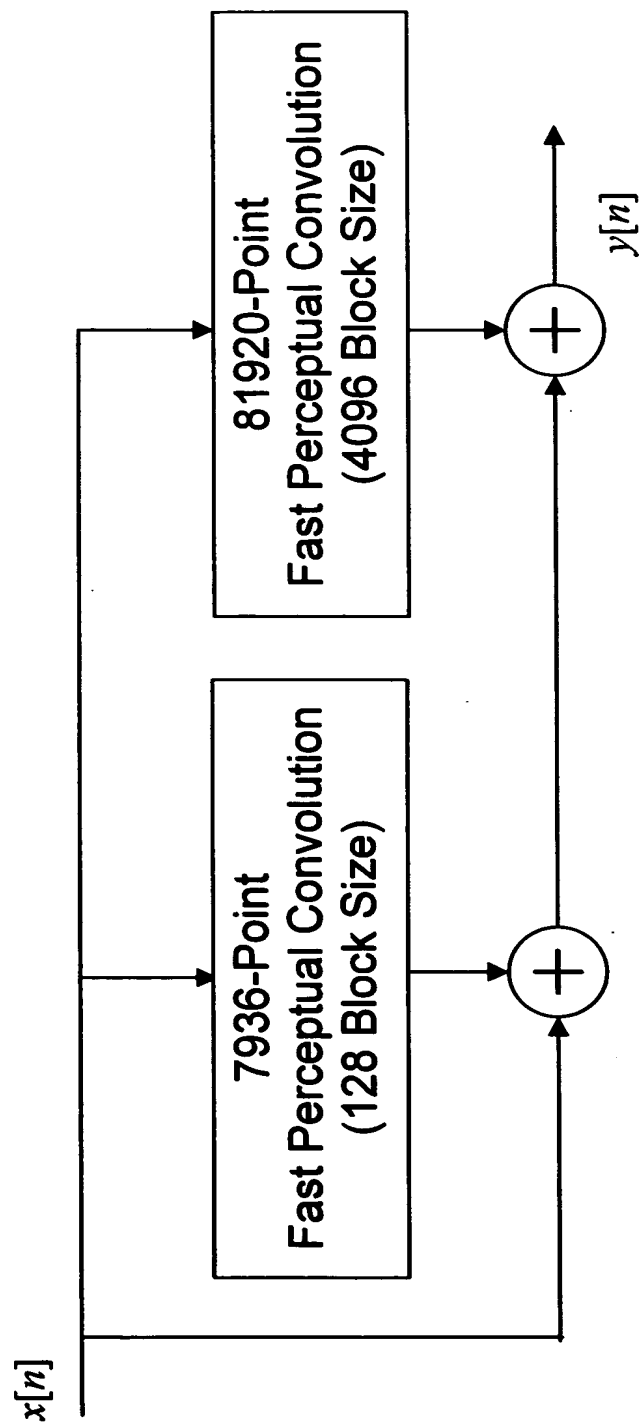


FIG. 17